

Notice of Allowability

Application No.

09/739,349

Examiner

Trang U. Tran

Applicant(s)

VORENKAMP ET AL.

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the RCE and the amendment under 37 C.F.R. 1.115 filed on July 01, 2004.
2. ☒ The allowed claim(s) is/are 3-10 (renumbered 1-8).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>07/01/2004</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

REASONS FOR ALLOWANCE

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on July 01, 2004 has been entered.

2. The following is an examiner's statement of reasons for allowance:

Claims 3-10 allowed.

Claim 3 is directed to an integrated digital IF demodulator which identifies the uniquely distinct features: "a VIF demodulator and Nyquist filter disposed on the substrate having an input coupled to the output of the AGC peak detection circuit; a second DAC disposed on the substrate having an input coupled to an output of the AFT circuit; a low pass filter disposed on the substrate having an input coupled to a second output of the VIF demodulator and Nyquist filter; a sync detection and AGC circuit disposed on the substrate having an input coupled to an output of the low pass filter; a digital VGA disposed on the substrate having an input coupled to the second output of the VIF demodulator and Nyquist filter and a control signal input coupled to an output of the sync detection and AGC circuit; a third digital to analog converter disposed on the substrate having an input coupled to an output of the digital VGA; a band pass filter

Art Unit: 2614

disposed on the substrate having an input coupled to the second output of the VIF demodulator and Nyquist filter; and a FM demodulator disposed on the substrate having an input coupled to an output of the band pass filter; and a fourth DAC disposed on the substrate having an input coupled to an output of the FM demodulator". The IDS filed on July 01, 2004, either singularly or in combination, fail to anticipate or render the above underlined limitations obvious.

Claims 4-10 are directed to a method of converting a received analog IF modulated signal into a plurality of analog signals. The independent claim 4 identifies the distinct features: "VIF demodulating and Nyquist filtering the input digital signal into a first digital filtered signal, a second digital filtered signal, a third digital filtered signal, and a fourth digital filtered signal; digitally converting the first digital filtered signal to a first analog output signal; digitally converting the second digital filtered signal to a low pass filtered digital signal; digitally converting the third digital filtered signal to a band pass filtered digital signal; digitally converting the fourth digital filtered signal to a high pass filtered digital signal; digitally converting the lowpass filtered digital signal to a second analog output signal; digitally converting the bandpass filtered digital signal to a third analog output signal; and digitally converting the highpass filtered digital signal to a fourth analog output signal". The IDS filed on July 01, 2004, either singularly or in combination, fail to anticipate or render the above underlined limitations obvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trang U. Tran whose telephone number is (571) 272-7358. The examiner can normally be reached on 8:00 AM - 5:30 PM, Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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February 16, 2006



Trang U. Tran
Examiner
Art Unit 2614